



File  
Hydro-Québec  
Annual Report  
1976

# Financial Statements and Statistics

1976



# Hydro-Québec Annual Report 1976

## Financial Statements and Statistics

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**Auditors' Report**

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We have examined the consolidated balance sheet of Hydro-Québec as at December 31, 1976, and the consolidated statements of revenue and expenditure, reserves, and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of Hydro-Québec as at December 31, 1976, and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Montreal, Canada,  
April 7, 1977.

Samson, Bélair & Associés  
Chartered Accountants

H. Marcel Caron & Associés  
affiliated with Clarkson, Gordon & Co.  
Chartered Accountants

**Consolidated Statement of Revenue and Expenditure**

(in thousands of dollars)

for the year ended December 31

		1976	1975
<b>Revenue</b>	Sales of electricity: primary . . . . .	\$ 1,002,634	\$ 850,082
	secondary . . . . .	43,601	42,529
		<b>1,046,235</b>	892,611
	Increase in unbilled revenue . . . . .	24,963	11,599
		<b>1,071,198</b>	904,210
	Other operating income (net) . . . . .	20,615	17,879
		<b>1,091,813</b>	922,089
<hr/>			
<b>Expenditure</b>	Operating, maintenance, administration and other expenses . . . . .	328,874	266,392
	Power purchased . . . . .	113,660	106,633
	Provision for renewals (depreciation) . . . . .	92,786	84,394
	Provincial levy . . . . .	20,000	20,000
	School and municipal taxes . . . . .	19,209	18,806
		<b>574,529</b>	496,225
<hr/>			
<b>Net operating income</b>		<b>517,284</b>	425,864
	Interest (Note 6) . . . . .	206,644	196,114
<b>Net income before allocations to reserves</b>		<b>\$ 310,640</b>	\$ 229,750
<hr/>			
<b>Allocations to reserves</b>	Interest . . . . .	\$ 134,671	\$ 107,773
	Provisions:		
	Contingencies . . . . .	121,602	74,163
	Rate stabilization . . . . .	21,424	18,084
	Amortization of capital invested . . . . .	32,943	29,730
		<b>175,969</b>	121,977
		<b>\$ 310,640</b>	\$ 229,750
<hr/>			

See accompanying notes

**Consolidated Balance Sheet**(in thousands of dollars)  
as at December 31

<b>Assets</b>		1976	1975
<b>Fixed assets</b>	Property and plant:		
	In service . . . . .	\$ 5,880,406	\$ 5,306,976
	Less reserve for renewals (accumulated depreciation) . . . . .	1,177,461	1,092,022
		<b>4,702,945</b>	<b>4,214,954</b>
	Construction work in progress . . . . .	2,633,599	1,970,380
		<b>7,336,544</b>	<b>6,185,334</b>
	Construction, operating and research equipment, at cost less accumulated depreciation . . . . .	70,799	63,658
		<b>7,407,343</b>	<b>6,248,992</b>
<b>Current assets</b>	Cash and short-term investments . . . . .	1,085,853	295,668
	Accounts receivable and accrued interest . . . . .	203,700	121,288
	Unbilled revenue . . . . .	101,744	76,781
	Materials and supplies . . . . .	73,083	68,020
	Prepaid expenses . . . . .	6,340	5,972
		<b>1,470,720</b>	<b>567,729</b>
<b>Other assets</b>	Investments (Note 2) . . . . .	131,819	131,925
	Unamortized debenture discount and expenses . . . . .	80,910	73,062
	Accounts receivable . . . . .	4,316	7,998
	Unamortized deferred cost on purchase of energy . . . . .	37,615	38,579
		<b>254,660</b>	<b>251,564</b>
		<b>\$9,132,723</b>	<b>\$ 7,068,285</b>

<b>Liabilities and Reserves</b>		<b>1976</b>	<b>1975</b>
<b>Long-term debt</b>			
Bonds and debentures less sinking funds (Notes 3 and 4)		\$ 6,497,660	\$ 4,864,179
Net exchange premium (Note 4)		59,659	77,266
		<b>6,557,319</b>	<b>4,941,445</b>
Other long-term debt (Note 5)		91,917	59,649
		<b>6,649,236</b>	<b>5,001,094</b>
Less payable within one year		82,919	91,301
		<b>6,566,317</b>	<b>4,909,793</b>
<b>Notes payable</b>	Notes payable within two years, of which \$21,472 (1976) and \$20,637 (1975) are due within one year	<b>21,472</b>	25,137
<b>Current liabilities</b>			
Bank indebtedness		8,437	16,762
Accounts payable and accrued liabilities		288,481	219,962
Accrued interest		175,563	126,339
Long-term debt payable within one year		82,919	91,301
		<b>555,400</b>	<b>454,364</b>
<b>Other liabilities</b>			
Workmen's compensation awards		2,481	2,208
Customers' deposits and advances		9,695	10,065
		<b>12,176</b>	<b>12,273</b>
<b>Reserves</b>			
Contingencies		860,544	683,699
Rate stabilization		345,707	300,040
Amortization of capital invested		771,107	682,979
		<b>1,977,358</b>	<b>1,666,718</b>
		<b>\$9,132,723</b>	<b>\$ 7,068,285</b>

See accompanying notes

On behalf of Hydro-Québec:  
(signed) Roland Giroux  
(signed) Robert Boyd

(signed) E.-A. Lemieux  
General Manager,  
Finance.

Montreal, Canada,  
April 7, 1977.

**Consolidated Statement of Reserves**(in thousands of dollars)  
for the year ended December 31

	1976			1975
	Contingencies	Rate stabilization	Amortization of capital invested	Total
Balance, beginning of year . . . . .	\$ 683,699	\$ 300,040	\$ 682,979	\$ 1,666,718
Add:				
Interest . . . . .	55,243	24,243	55,185	134,671
Provisions . . . . .	121,602	21,424	32,943	175,969
Balance, end of year . . . . .	<b>\$860,544</b>	<b>\$345,707</b>	<b>\$771,107</b>	<b>\$1,977,358</b>

See accompanying notes

**Consolidated Statement of Changes in Financial Position**  
 (in thousands of dollars)  
 for the year ended December 31

		1976	1975
<b>Source of funds</b>			
	<b>Operations</b>		
	Net income before allocations to reserves . . . . .	\$ 310,640	\$ 229,750
	Add (deduct) items not requiring a movement of funds:		
	Provision for renewals (depreciation) . . . . .	92,786	84,394
	Depreciation of operating and research equipment . . . . .	10,774	8,703
	Amortization of debenture discount and expenses . . . . .	5,430	4,602
	Amortization of deferred cost on purchase of energy . . . . .	964	367
	Net profit on repurchase of debentures . . . . .	(8,542)	(10,694)
	Total funds from operations . . . . .	<b>412,052</b>	317,122
	Issue of debentures and other long-term debt (less discount and expenses) . . . . .	1,765,220	1,080,008
	Increase of accounts payable and accrued liabilities, accrued interest and other liabilities . . . . .	117,646	101,637
	Sundry items . . . . .	6,254	5,756
		<b>\$2,301,172</b>	\$ 1,504,523
<b>Application of funds</b>			
	Additions to fixed assets . . . . .	\$ 1,266,978	\$ 1,141,766
	Maturities of bonds and debentures and other long-term debt . . . . .	42,024	99,085
	Purchase of sinking fund investments (cost) . . . . .	63,264	55,338
	Decrease in notes payable . . . . .	3,665	20,004
	Increase in cash and short-term investments less bank indebtedness . . . . .	798,510	150,004
	Increase in accounts receivable and accrued interest and unbilled revenue . . . . .	103,693	29,905
	Increase in materials and supplies and prepaid expenses . . . . .	5,431	14,537
	Decrease (increase) in net exchange premium . . . . .	17,607	(6,116)
		<b>\$2,301,172</b>	\$ 1,504,523

See accompanying notes

**Notes to Consolidated Financial Statements**

December 31, 1976

**Note 1****Summary of significant accounting policies**

A summary of the major accounting policies of Hydro-Québec is presented below to assist the reader in analyzing the consolidated financial statements.

*a) Consolidation*

The consolidated financial statements include the financial statements of Hydro-Québec and of all its subsidiary companies including Société d'énergie de la Baie James.

*b) Rates and Reserves*

Under the provisions of its Act the object of Hydro-Québec is to supply power in the Province of Quebec at the lowest rates consistent with sound financial administration. More specifically, the Hydro-Quebec Act provides that the rates should be maintained at a level sufficient to defray all costs and to accumulate three reserves: Contingencies, Rate stabilization and Amortization of capital invested. Rates are fixed by Hydro-Québec and are subject to the approval of the Lieutenant-Governor in Council.

Each year, Hydro-Québec must credit to these three reserves, from its net income, interest calculated at a rate equivalent to the weighted average of the effective interest rates on its outstanding long-term debt (8.08% in 1976 and 7.5% in 1975). The balance of net income is allocated to the reserves and contributes to an adequate coverage of interest charges and to the financing of part of the construction program.

The three reserves constitute the net worth of Hydro-Québec.

*c) Investments*

All of the short-term investments mature within seven months and are shown at cost, which approximates market value. The long-term investments are carried at cost (see Note 2).

*d) Materials and supplies*

Hydro-Québec values its inventories of materials and supplies on the basis of average cost. These materials and supplies are primarily those required for the construction and maintenance of its distribution system.

*e) Unamortized deferred cost on purchase of energy*

In accordance with the terms of a contract with Churchill Falls (Labrador) Corporation Limited ("CFLCo") (see Note 8), Hydro-Québec absorbs the part of the interest charges attributable to the excess of the effective interest rate on the First Mortgage Bonds of CFLCo over 5½% and on the General Mortgage Bonds and other indebtedness over 6%. The portion of these payments, which has been deferred before the plant reached full production in 1975, is amortized over the life of the contract (40 years) by charges to the cost of power purchased. Annual payments which Hydro-Québec has to make under this agreement are also charged to the cost of power purchased.

*f) Sinking funds*

Hydro-Québec invests substantially all of its sinking funds in its own debentures and in bonds of its subsidiaries and follows the practice of carrying these investments at par, which may not be indicative of cost or current market value. The resulting profit, net of unamortized debenture or bond discount and other expenses, is included with interest expense in the consolidated statement of revenue and expenditure. Debentures or bonds of an issue purchased for the sinking fund of that issue are cancelled.

*g) Foreign exchange translation (see Note 4)*

Consolidated long-term debt payable in U.S. currency is carried in the accounts at the rate of \$1 U.S. equals \$1 Canadian, while consolidated long-term debt payable in Deutsche marks and Swiss francs is carried in the accounts at the Canadian dollar equivalent at the dates of borrowing.

The adjustment arising from the conversion of debt payable in U.S. funds into Canadian funds at the rates of exchange in effect at the time the debt was incurred, less the exchange premium on debentures purchased for sinking funds, is carried on the consolidated balance sheet in a separate account called "Net exchange premium".

Current assets and liabilities, including long-term debt payable within one year, are adjusted to Canadian currency at year-end rates of exchange and the resulting unrealized exchange gains or losses are included with interest expense in the consolidated statement of revenue and expenditure.

Exchange gains and losses at maturities of debentures and at purchases for sinking funds are included with interest expense in the consolidated statement of revenue and expenditure.

*h) Property and plant and Reserve for renewals (accumulated depreciation)*

Property and plant are carried at cost which includes material, direct labor and overhead costs such as engineering and administration that are applicable to the capital construction program. The cost also includes interest charged to Construction work in progress as explained under i) below. Expenditures for additions, improvements and renewals are capitalized and expenditures for maintenance and repairs are charged against income. When assets are sold or retired, their cost and accumulated depreciation are removed from the accounts and any gain or loss resulting from their disposal is amortized over a period of 10 years using a sinking fund method.

Preliminary engineering, investigation work and survey costs incurred on projects before their authorization for construction are included in Construction work in progress and no interest is charged on these costs until such authorization. When a project is abandoned its costs are charged to operations.

The costs of generating facilities are transferred to Property and plant in service by instalments proportionate to the number of generating units completed and in service in relation to the total number of units of the project. The costs of transmission, distribution and other facilities are transferred to Property and plant in service when completed and in commercial operation.

Hydro-Québec uses a uniform sinking fund method of providing for depreciation of its own and its subsidiaries' property and plant, including intangible assets, based on their respective service lives. The rate of interest used in the sinking fund method is 3%.

Note 1 — Summary of significant accounting policies (*cont'd*)

The expected service lives for the main categories of property and plant in service are as follows:

Category	Life
Hydraulic powerhouses . . . . .	50 years
Hydraulic turbines and generators . . . . .	40 years
Dams and reservoirs . . . . .	50 years
Transmission towers (steel) and conductors . . . . .	50 years
Distribution poles (wood) . . . . .	25 years
Distribution conductors . . . . .	40 years
Intangible assets . . . . .	25 years

*i) Interest charged to Construction work in progress*

Interest is charged to Construction work in progress at a rate equivalent to the weighted average of the effective interest rates on debentures of Hydro-Québec issued to finance such construction. This rate was 9.47% in 1976 and 8.96% in 1975.

*j) Construction, operating and research equipment*

This equipment is carried at cost. Hydro-Québec uses the straight-line method of providing for depreciation of these assets based on their respective service lives. The cost of equipment used for the construction of major generating facilities is included in Construction work in progress.

*k) Unbilled revenue*

Revenues are recorded on the basis of cycle billings and accrued in respect of energy delivered but not billed.

		1976 (\$'000')	1975 (\$'000')
<b>Note 2</b>			
Investments, at cost	Churchill Falls (Labrador) Corporation Limited (see Note 8)		
	General Mortgage Bonds, 7½%, due 2010 (par value \$100 million) . . . . .	\$ 90,500	\$ 90,500
	Common shares . . . . .	34,333	34,333
		<b>124,833</b>	124,833
	Gelco Enterprises Ltd., 4% unsecured note, due 1991 . . . . .	6,895	7,000
	Sundry investments . . . . .	91	92
		<b>\$131,819</b>	\$ 131,925

On November 16, 1976, Churchill Falls (Labrador) Corporation Limited ("CFLCo") qualified for exemption from income taxes, and accumulated deferred income taxes of \$28,084,000 since the beginning of its operations to that date have been added during the year to its retained earnings. The share of Hydro-Québec in the retained earnings of CFLCo amounted to \$37,295,000 at December 31, 1976, including its share of the above adjustment, of which \$7,280,000 was earned in 1976 (after deduction of income taxes to November 16, 1976) and \$9,135,000 in 1975. Dividends of \$2,545,000 from CFLCo are included in investment income in 1976 (see Note 6).

The shareholders have agreed in principle that CFLCo will make payments to the Province of Newfoundland in future years equivalent to Newfoundland's share in the income taxes that would have been paid if CFLCo had remained subject to such taxes. As the Province of Newfoundland would have received substantially all of the income taxes paid by CFLCo, Hydro-Québec's share in the earnings of CFLCo and its payment of part of CFLCo's interest costs should not change significantly.

Note 3

Bonds and debentures

Series	Interest rate	Year of issue	Year of maturity	Bonds and debentures (\$'000')	Sinking fund investments (\$'000')
<b>Debentures of Hydro-Québec — Guaranteed by the Province of Quebec</b>					
**"K"	3½%	1953	1978 . . . . .	\$ 32,548 U.S.	\$ 19,744
**"N"	3½%	1956	1981 . . . . .	20,702 U.S.	3,712
**"P"	4½%	1956	1981 . . . . .	15,187 U.S.	2,152
**"Q"	4¾%	1957	1977 . . . . .	28,145 U.S.	
**"S"	5%	1957	1982 . . . . .	13,734	
**"T"	3¾%	1958	1983 . . . . .	26,116 U.S.	290
**"V"	5%	1958	1979 . . . . .	14,176	
**"W"	5%	1959	1980 . . . . .	19,755	
**"X"	5%	1959	1984 . . . . .	32,810 U.S.	
**"Y"	6%	1959	1979 . . . . .	17,280	
**"Z"	5½%	1960	1982 . . . . .	23,889	
**"AA"	5½%	1960	1983 . . . . .	18,182	
**"AB"	5½%	1961	1985 . . . . .	28,559	
**"AC"	5½%	1961	1985 . . . . .	26,316	
**"AD"	5½%	1962	1982 . . . . .	30,216	
**"AF"	5¾%	1962	1984 . . . . .	39,534	
**"AG"	5%	1963	1988 . . . . .	228,962 U.S.	688
**"AM"	5¼%	1963	1986 . . . . .	36,752	
**"AN"	5½%	1964	1984, 1994 . . . . .	30,903	

Note 3 — Bonds and debentures (cont'd)

Series	Interest rate	Year of issue	Year of maturity	Bonds and debentures (\$'000')	Sinking fund investments ('000')
**"AO"	4½%	1964	1994 . . . . .	\$ 50,000 U.S.	\$ 2,655
**"AP"	4¾%	1964	1989 . . . . .	37,595 U.S.	
**"AQ"	5½%	1964	1988 . . . . .	46,182	
**"AR"	5½%, 5%	1965	1987, 1995 . . . . .	56,607	
**"AS"	4¾%	1965	1985 . . . . .	42,898 U.S.	
**"AT"	5¼%	1966	1987 . . . . .	42,641 U.S.	
**"AU"	6%	1966	1991 . . . . .	41,866	
**"AV"	5¾%	1966	1992 . . . . .	52,075 U.S.	
**"AW"	6%	1966	1980, 1990 . . . . .	40,973	272
**"AX"	6¼%	1966	1991 . . . . .	32,507 U.S.	
**"AY"	6¼%	1967	1993 . . . . .	50,385 U.S.	
**"AZ"	6½%	1967	1978, 1990 . . . . .	42,330	
**"BA"	6¼%	1967	1993 . . . . .	43,999 U.S.	
**"BB"	6½%	1967	1992 . . . . .	42,525 U.S.	
**"BC"	6¾%, 7%, 6%, 7%	1967	1977, 1980, 1994 . . . . .	46,500	
**"BD"	6¾%	1968	1989 . . . . .	54,603 U.S.	
**"BE"	7½%, 7½%, 7%	1968	1977-78, 1980, 1994 . . . . .	40,400	
**"BF"	7¾%	1968	1986 . . . . .	23,258 U.S.	500
**"BG"	7¼%	1968	1991 . . . . .	43,620 U.S.	
* —	6¾%	1969	1984 (120 million Deutsche marks) . . . . .	32,173	4,082
* —	7¼%	1969	1984 (80 million Deutsche marks) . . . . .	21,636	7
**"BH"	7¾%	1969	1990 . . . . .	206	
**"BI"	8¾%	1969	1999 . . . . .	47,485 U.S.	
"BJ"	8%	1969	1979 . . . . .	5,861 U.S.	
**"BK"	8½%	1969	1992 . . . . .	24,728	
**"BL"	9¾%	1969	1995 . . . . .	47,407 U.S.	815
**"BM"	9½%	1970	1990 . . . . .	5,635	
**"BN"	9¼%	1970	1995 . . . . .	58,038 U.S.	600
**"BO"	9½%	1970	1990 . . . . .	28,085	
**"BP"	9½%	1970	1997 . . . . .	72,368 U.S.	
**"BQ"	9¼%	1970	1985 . . . . .	11,100 U.S.	
**"BR"	8¾%	1971	1999 . . . . .	72,913 U.S.	
**"BS"	8¼%	1971	1986 . . . . .	16,000 U.S.	
**"BT"	7¾%	1971	1996 . . . . .	47,350	
**"BU"	8¾%	1971	1996 . . . . .	47,549	
* —	8%	1971	1986 (100 million Deutsche marks) . . . . .	29,835	
**"BV"	8½%	1971	2001 . . . . .	75,000 U.S.	
**"BW"	8½%	1971	1986 . . . . .	22,888 U.S.	19
**"BX"	7¾%	1972	2002 . . . . .	100,000 U.S.	
* —	6½%	1972	1987 (100 million Deutsche marks) . . . . .	31,391	
**"BY"	8¼%	1972	1997 . . . . .	47,894	
**"BZ"	8¼%	1972	1993 . . . . .	57,500	
**"CA"	8%, 8¾%	1972	1980, 1997 . . . . .	62,689	
"CB"	8¼%	1972	1996 . . . . .	50,000	
* —	6¼%	1972	1987 (80 million Swiss francs) . . . . .	21,021	
**"CC"	7½%	1973	2003 . . . . .	125,000 U.S.	
"CD"	8%	1973	1998 . . . . .	50,000	
* —	6½%	1973	1988 (100 million Deutsche marks) . . . . .	35,234	
"CE"	8¼%	1973	1998 . . . . .	55,000	
**"CF"	8½%	1973	2003 . . . . .	100,000 U.S.	
"CG"	8¾%	1973	1998 . . . . .	50,000	
"CH"	8½%	1973	1998 . . . . .	50,000	
**"CI"	8¼%	1974	2004 . . . . .	125,000 U.S.	
**"CJ"	8½%	1974	1989 . . . . .	30,000 U.S.	100
"CK"	9%	1974	1999 . . . . .	60,000	
"CL"	9¾%	1974	1996 . . . . .	80,000	
**"CM"	10½%	1974	1999 . . . . .	150,000 U.S.	
—	9%	1974	1979 (40 million Swiss francs) . . . . .	13,200	
"CN"	10%	1974	1980 . . . . .	50,000	
"CO"	10%	1974	1982 . . . . .	100,000	
"CP"	10%	1974	1982 . . . . .	100,000 U.S.	
**"CQ"	10¼%	1975	2005 . . . . .	200,000 U.S.	
"CR"	9%, 9¾%	1975	1985, 2000 . . . . .	120,000	
"CS"	10%	1975	2000 . . . . .	80,000	
**"CT"	9¾%	1975	2005 . . . . .	200,000 U.S.	
"CU"	10½%	1975	1997 . . . . .	65,000	

Note 3 — Bonds and debentures (*cont'd*)

Series	Interest rate	Year of issue	Year of maturity	Bonds and debentures (\$'000)	Sinking fund investments (\$'000)
—	8%	1975	1980 (100 million Swiss francs) . . . . .	\$ 38,400	
"CV"	9½%	1975	1981 . . . . .	50,000	
*"CW"	10%	1975	2005 . . . . .	250,000 U.S.	
—	7¾%	1975	1980 (100 million Swiss francs) . . . . .	38,500	
**"CX"	10¼%	1976	1996 . . . . .	1,000,000 U.S.	
**"CY"	10¾%	1976	1996 . . . . .	35,000	
* —	6%	1976	1991 (80 million Swiss francs) . . . . .	31,900	
*"CZ"	8½%	1976	2006 . . . . .	250,000 U.S.	
"DA"	10%	1976	2001 . . . . .	120,000	
"DB"	8½%	1976	1986 . . . . .	125,000 U.S.	
*"DC"	8¾%	1976	1996 . . . . .	50,000 U.S.	
—	5¾%	1976	1981 (100 million Swiss francs) . . . . .	41,400	
—	5½%	1976	1981 (100 million Swiss francs) . . . . .	41,400	
—	5¾%	1976	1981 (100 million Swiss francs) . . . . .	41,400	
Total debentures of Hydro-Québec . . . . .				<b>\$ 6,502,916</b>	<b>\$ 35,636</b>
*Sinking fund debentures					
<b>Bonds of subsidiaries</b>					
<b>The Shawinigan Water and Power Company</b>					
"S"	5¾%	1961	1981 . . . . .	\$ 12,642	
<b>Southern Canada Power Company, Limited</b>					
"D"	3½%	1951	1981 . . . . .	2,475	
<b>Quebec Power Company</b>					
"G"	6¼%	1962	1982 . . . . .	10,983	
<b>Lower St. Lawrence Power Company</b>					
"F"	5½%	1959	1984 . . . . .	820 U.S.	
<b>Saguenay Electric Company</b>					
"A"	5½%	1962	1982 . . . . .	3,460	
Total bonds of subsidiaries . . . . .				<b>\$ 30,380</b>	
<b>Total bonds and debentures</b> . . . . .				<b>\$ 6,533,296</b>	<b>\$ 35,636</b>

Bonds of subsidiaries are guaranteed by Hydro-Québec, which guarantee is in turn guaranteed by the Province of Quebec

Consolidated long-term debt maturities and sinking fund requirements in each of the next five years are approximately as follows:

	(\$'000)
1977 . . . . .	\$ 82,919
1978 . . . . .	\$ 110,680
1979 . . . . .	\$ 186,060
1980 . . . . .	\$ 326,015
1981 . . . . .	\$ 377,506

Note 4

Net exchange premium

Consolidated long-term debt at December 31, 1976 includes \$4,073,874,000 U.S., 465 million Deutsche marks and 700 million Swiss francs.

If the long-term debt payable in foreign currencies were converted into Canadian dollars at the rates of exchange prevailing at December 31, 1976, the premium required would be approximately \$59,166,000 more than the net exchange premium shown on the consolidated balance sheet. As a result, if the long-term debt payable in various currencies in the principal amount of \$6,566,317,000 at December 31, 1976 were converted into Canadian dollars at the rates of exchange prevailing on this date, this principal amount would be \$6,625,483,000.

	Note 5	1976 (\$'000')	1975 (\$'000')
Other long-term debt	Rural Electrification Bureau, 1977 — 1994*	\$ 5,628	\$ 6,327
	Government of Canada, 1977 — 1999**	19,975	20,308
	Atomic Energy of Canada Limited**	66,000	32,000
	Other long-term debt maturing from 1977 to 1984	314	1,014
		<b>\$91,917</b>	<b>\$ 59,649</b>

\*Does not bear interest as long as there is no default under the provisions of the governing agreements.

\*\*Notes guaranteed by the Province of Quebec at various rates from 7½% to 10% payable in 25 equal annual instalments following completion of the project involved. On March 18, 1977, Hydro-Québec issued to Atomic Energy of Canada Limited a note for \$44 million, bearing interest at the rate of 8¾%.

	Note 6	1976 (\$'000')	1975 (\$'000')
Interest	Interest on long-term debt	\$ 485,567	\$ 344,330
	Interest on bank indebtedness and notes payable	4,143	3,732
	Amortization of debenture discount and expenses	5,430	4,602
		<b>495,140</b>	<b>352,664</b>
	Less:		
	Interest charged to construction work in progress	186,178	118,826
	Investment income	93,475	27,222
	Net profit on repurchase of debentures	8,542	10,694
	Foreign exchange gain (loss) on repurchase of debentures and translation of foreign current assets and liabilities	301	(192)
		<b>288,496</b>	<b>156,550</b>
		<b>\$206,644</b>	<b>\$ 196,114</b>

#### Note 7

##### Pensions

The Hydro-Québec employees' retirement plan is a contributory, benefit-based plan, under which the benefits payable are guaranteed by Hydro-Québec. The initial actuarial deficit in respect of services prior to 1966 and the experience deficiency for current services amounted to approximately \$28 million and \$5 million, respectively, at December 31, 1974 as determined by an actuarial survey at that date.

The total pension cost of \$23,833,000 for 1976 (\$19,915,000 for 1975) provides fully for Hydro-Québec's contribution to the Quebec Pension Plan and to the Retirement Fund in respect of current services, amortization of the experience deficiency over a five-year period and amortization of the initial actuarial deficit over a period ending December 31, 1995.

An additional past service obligation, which amounted to approximately \$34 million at December 31, 1974 as determined by an actuarial study at that date, related to supplementary amounts that Hydro-Québec has decided to pay effective January 1, 1972 in order to assure a minimum pension of \$1,200 per year and to adjust the pensions paid or to be paid to the pensioners of the subsidiaries acquired in 1963, is being substantially amortized over a period of thirty years by annual charges to operations. Hydro-Québec paid \$2,168,000 in 1976 (\$1,902,000 in 1975) in respect of these benefits.

In addition to the preceding, effective January 1, 1976, Hydro-Québec has decided to raise all full pensions by \$600 per year and all half pensions by \$300 per year and to increase the minimum pension from \$1,200 to \$1,500 per year for all its pensioners, as well as those subject to pension before December 31, 1976. This additional past service obligation is estimated to cost approximately \$10.8 million according to an actuarial study as at December 31, 1975 and will be substantially amortized over a period of 30 years by annual charges to operations. Hydro-Québec paid \$1,111,000 in 1976 in respect of these benefits.

#### Note 8

##### Commitments and projected capital expenditures

###### Churchill Falls

In May 1969, Hydro-Québec executed a contract with Churchill Falls (Labrador) Corporation Limited ("CFLCo") for the purchase, starting in 1972, of energy from a generating station at Churchill Falls in Labrador with a rated capacity of 5,225,000 kilowatts. At December 31, 1976, Hydro-Québec held 34.2% of the common stock of CFLCo and \$100 million of its General Mortgage Bonds at a total cost of approximately \$124.8 million.

The power contract provides for the purchase by Hydro-Québec for a period of 40 years from the Effective Date as defined in the power contract (September 1, 1976) of all the power generated at Churchill Falls except for amounts required (not exceeding 12% of the energy generated) by Newfoundland. This contract will be automatically renewed for a further period of 25 years upon already agreed terms. The price to be paid by Hydro-Québec for the energy, which should be finalized in 1977, will vary until the year 2016 and will depend upon the final cost of construction of the plant. It is estimated that the maximum total annual payments by Hydro-Québec for energy will range from \$93 million to \$80 million until the year 2016 and will be approximately \$63 million during the remaining 25 years.

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**Note 8 — Commitments and projected capital expenditures (cont'd)**

In addition, Hydro-Québec is obligated to pay CFLCo an amount equal to a part of the interest charges on the First Mortgage Bonds, General Mortgage Bonds and other indebtedness of CFLCo. Hydro-Québec estimates that these payments will not exceed \$15 million per annum, declining as the bonds and other indebtedness are retired. Subject to certain limitations and compensations, the contract requires Hydro-Québec to make payments for energy whether or not taken; Hydro-Québec can also be required to make additional advances, against the issue of units of Subordinated Debentures and shares of Common Stock, to service the debt of CFLCo and to cover its expenses if funds are not otherwise available.

On September 14, 1976, CFLCo and Hydro-Québec were served with concurrent Writs of Summons and a Statement of Claim in an action brought by the Attorney General of Newfoundland before the Supreme Court of Newfoundland, seeking a judgment declaring that Newfoundland is entitled under the CFLCo lease to make a request to CFLCo for 800 megawatts of power generated from the waters of the Upper Churchill River watershed commencing October 1, 1983, that CFLCo is obliged to comply with such request, and that such compliance would not constitute a default under the power contract or the financing agreements of CFLCo. Under the terms of the Writ of Summons served upon it, Hydro-Québec will cause an Appearance and Defense to be entered in the action. Hydro-Québec has been advised by its counsel, Geoffrion, Prud'homme, Chevrier, Cardinal, Marchessault, Mercier & Greenstein, that the validity of the power contract with CFLCo and the enforceability thereof according to its terms cannot be successfully challenged before the courts, and in particular that the above action, insofar as it claims a declaration which would affect the existing rights of Hydro-Québec under the power contract, is unfounded.

**James Bay**

In 1971, the Quebec Government created Société de développement de la Baie James to undertake the development of the natural resources in northwestern Quebec and Société d'énergie de la Baie James to develop the hydro-electric resources of the same area.

At December 31, 1976, all the shares of the authorized capital stock of Société d'énergie de la Baie James were either owned or subscribed for by Hydro-Québec.

The James Bay project currently consists of the construction of four generating plants on the La Grande River with a projected capacity of 10,190,000 kilowatts at an estimated cost in 1974 of \$11.9 billion, revised to \$16.2 billion in 1976, with completion expected in 1985. At December 31, 1976, \$2 billion has been invested in the project.

In May 1972, the James Bay Crees and Inuit of Quebec instituted proceedings in the Superior Court for the District of Montreal to have the James Bay Region Development Act declared unconstitutional and ultra vires of the jurisdiction of the Legislature of Quebec, and, in addition, to obtain a permanent order of injunction to prevent the carrying out of all works in the James Bay Territory related to this Act.

Following various interlocutory proceedings, an agreement in principle was entered into on November 15, 1974 by the James Bay Crees and Inuit of Quebec and the Province of Quebec, Société d'énergie de la Baie James, Société de développement de la Baie James, Hydro-Québec and the Government of Canada whereby the parties undertook to execute a final agreement, providing, among other things, for the extinguishment of all claims of the James Bay Crees and Inuit of Quebec in and to the territory on which the project is located.

The final agreement, signed on November 11, 1975, was subsequently confirmed by the James Bay Crees and Inuit of Quebec. The agreement is subject to enactment within two years of implementing legislation by the Quebec National Assembly and the Government of Canada approving, giving effect to and declaring valid the said agreement.

The final agreement provides for the termination of all current legal proceedings and the undertaking not to institute any future legal proceedings affecting the project and the claims of the James Bay Crees and Inuit of Quebec with respect thereto. It also provides for a final basic monetary compensation of \$225 million. Of this amount, \$75 million is to be paid by Société d'énergie de la Baie James or Hydro-Québec, in instalments to be determined with reference to the future installation of hydro-electric generating capacity within the territory. Such instalments, which have not been provided for in the accounts, will commence one year after each turbine generator has been in commercial operation, will then be charged to operations and will extend to December 31, 1996, at which date the balance, if any, is payable. Another \$75 million is to be paid over a period of ten years from March 31, 1976 to January 1, 1985 to the extent of 57% by the Province (and/or a corporation designated by the Province) and to the extent of 43% by the Government of Canada. The balance of \$75 million is to be paid by the Province.

**Projected capital expenditures**

Hydro-Québec carries on a continuous construction program in anticipation of future demand for electrical power in the Province. The capital expenditures projected for the calendar year 1977 amount to \$2,173 million, including \$1,413 million for the James Bay project.

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**Note 9**

Anti-inflation Program

On December 19, 1975, the Government of the Province of Quebec sanctioned An Act Respecting Anti-Inflation Measures. On March 16, 1977, the Act was abrogated. According to the regulations adopted in virtue of this Act, Hydro-Québec was not subject to the Inflation Control Commission in respect of its prices and profit margins but was expressly subject to it in respect of compensation control.

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**Note 10**

Reclassification and comparative figures

At December 31, 1976, Hydro-Québec has shown the current portion of its long-term debt under current liabilities and has regrouped under interest certain items in the consolidated statement of revenue and expenditure. The comparative figures for 1975 have been reclassified accordingly.

**Five-Year Summary of Consolidated Revenue and Expenditure**  
(in thousands of dollars)

		1976	1975	1974	1973	1972
Revenue	Sales of electricity: primary . . . . .	\$ 1,002,634	\$ 850,082	\$ 738,866	\$ 638,628	\$ 552,768
	secondary . . . . .	43,601	42,529	36,542	15,475	8,377
		<b>1,046,235</b>	892,611	775,408	654,103	561,145
	Increase in unbilled revenue . . . . .	24,963	11,599	7,764	7,542	7,449
		<b>1,071,198</b>	904,210	783,172	661,645	568,594
	Other operating income (net) . . . . .	20,615	17,879	14,709	12,785	11,554
		<b>1,091,813</b>	922,089	797,881	674,430	580,148
Expenditure	Operating, maintenance, administration and other expenses . . . . .	328,874	266,392	236,853	201,641	172,300
	Power purchased . . . . .	113,660	106,633	86,930	62,753	34,446
	Provision for renewals (depreciation) . . . . .	92,786	84,394	78,447	75,439	70,030
	Provincial levy on energy generated . . . . .	—	—	—	8,222	29,882
	Provincial levy . . . . .	20,000	20,000	20,000	15,000	—
	School and municipal taxes . . . . .	19,209	18,806	18,379	18,783	18,875
		<b>574,529</b>	496,225	440,609	381,838	325,533
Net operating income		<b>517,284</b>	425,864	357,272	292,592	254,615
Interest	Interest on long-term debt . . . . .	485,567	344,330	259,472	224,062	191,511
	Interest on bank indebtedness and notes payable . . . . .	4,143	3,732	4,085	3,652	4,636
	Amortization of debenture discount and expenses . . . . .	5,430	4,602	3,990	3,820	3,524
	Interest charged to construction work in progress . . . . .	(186,178)	(118,826)	(62,757)	(40,412)	(25,825)
	Investment income . . . . .	(93,475)	(27,222)	(15,150)	(10,449)	(10,775)
	Net profit on repurchase of debentures . . . . .	(8,542)	(10,694)	(6,740)	(7,632)	(6,405)
	Foreign exchange (gain) or loss on repurchase of debentures and translation of foreign current assets and liabilities . . . . .	(301)	192	(2,251)	(1,058)	(954)
		<b>206,644</b>	196,114	180,649	171,983	155,712
Net income before allocations to reserves		<b>\$ 310,640</b>	\$ 229,750	\$ 176,623	\$ 120,609	\$ 98,903
Allocations to reserves	Interest . . . . .	<b>\$ 134,671</b>	\$ 107,773	\$ 88,476	\$ 77,274	\$ 68,487
	Provisions:					
	Contingencies . . . . .	121,602	74,163	44,625	3,019	—
	Rate stabilization . . . . .	21,424	18,084	15,663	13,233	4,653
	Amortization of capital invested . . . . .	32,943	29,730	27,859	27,083	25,763
		<b>175,969</b>	121,977	88,147	43,335	30,416
		<b>\$ 310,640</b>	\$ 229,750	\$ 176,623	\$ 120,609	\$ 98,903

## Five-Year Consolidated Sales and Revenue

	1976	1975	1974	1973	1972
<b>Electrical Energy Generated and Purchased (in millions of kWh)</b>					
Generated (net) . . . . .	60,882	54,392	59,893	57,514	55,660
Purchased . . . . .	34,381	31,687	25,938	18,390	11,560
Received as per agreement . . . . .	1,972	2,629	133	61	101
	<b>97,235</b>	88,708	85,964	75,965	67,321
Less:					
Losses and internal use . . . . .	9,218	7,974	6,956	5,715	5,565
Delivered as per agreement . . . . .	2,794	3,212	1,130	1,099	766
Increase in unbilled sales . . . . .	1,206	585	183	471	594
Total electrical energy sold . . . . .	<b>84,017</b>	76,937	77,695	68,680	60,396
<b>Electricity Sales (in millions of kWh)</b>					
Residential and farm . . . . .	21,611	18,768	17,260	15,215	13,703
Commercial (including Municipal) . . . . .	14,673	13,113	12,033	11,149	10,629
Industrial: Primary . . . . .	27,055	24,506	27,100	24,566	22,766
Secondary . . . . .	1,816	1,778	2,710	2,171	1,573
Street lighting and luminaires . . . . .	599	576	539	512	457
Transportation . . . . .	157	151	142	160	164
Wholesale: Primary . . . . .	13,325	14,324	13,123	10,965	9,194
Secondary . . . . .	4,677	3,598	4,654	3,863	1,848
Interdepartmental . . . . .	104	123	134	79	62
Total electricity sales . . . . .	<b>84,017</b>	76,937	77,695	68,680	60,396
<b>Sales Revenue (in thousands of dollars)</b>					
Residential and farm . . . . .	\$ 376,990	\$ 315,358	\$ 269,075	\$ 235,615	\$ 203,038
Commercial (including Municipal) . . . . .	260,939	218,218	182,761	164,842	152,299
Industrial: Primary . . . . .	260,736	218,308	201,068	171,760	147,949
Secondary . . . . .	8,171	8,188	9,042	5,228	3,655
Street lighting and luminaires . . . . .	23,618	20,188	17,083	15,196	13,437
Transportation . . . . .	2,094	1,700	1,420	1,482	1,371
Wholesale: Primary . . . . .	77,912	75,940	67,053	49,472	34,469
Secondary . . . . .	35,430	34,341	27,500	10,247	4,722
Interdepartmental . . . . .	345	370	406	261	205
Total sales revenue . . . . .	<b>\$1,046,235</b>	\$ 892,611	\$ 775,408	\$ 654,103	\$ 561,145
<b>Average Revenue (cents per kWh)</b>					
Residential and farm . . . . .	1.744¢	1.680¢	1.559¢	1.549¢	1.482¢
Commercial (including Municipal) . . . . .	1.778¢	1.664¢	1.519¢	1.479¢	1.433¢
Industrial: Primary . . . . .	0.964¢	0.891¢	0.742¢	0.699¢	0.650¢
Secondary . . . . .	0.450¢	0.460¢	0.334¢	0.241¢	0.232¢
Wholesale: Primary . . . . .	0.585¢	0.530¢	0.511¢	0.451¢	0.375¢
Secondary . . . . .	0.757¢	0.954¢	0.591¢	0.265¢	0.256¢
Other . . . . .	3.029¢	2.619¢	2.320¢	2.256¢	2.198¢
Total Customer Accounts					
Residential and Farm Accounts	(year-end) . . . . .	<b>2,188,222</b>	2,135,724	2,080,650	2,017,079
	(year-end) . . . . .	<b>1,941,604</b>	1,893,969	1,841,671	1,783,871
					1,716,529

**Statistics of Electricity Generated and Purchased  
and its Disposal in 1976**

Gross Generation		The consolidated system (in millions of kWh)
<b>Hydro-Electric Stations</b>		
Upper Ottawa	(5 plants) . . . . .	2,550
Gatineau	Paugan . . . . .	1,055
	Others (3 plants) . . . . .	1,155
Lower Ottawa	Carillon . . . . .	2,448
	Others (7 plants) . . . . .	920
Upper Saint Lawrence	Beauharnois . . . . .	11,555
	Other (1 plant) . . . . .	934
Saint Maurice	La Trenche . . . . .	1,658
	Beaumont . . . . .	1,455
	La Tuque . . . . .	1,244
	Shawinigan 3 . . . . .	1,105
	Others (4 plants) . . . . .	3,813
Bersimis	Bersimis 1 . . . . .	5,589
	Bersimis 2 . . . . .	2,865
Outardes	Outardes 3 . . . . .	3,597
	Outardes 4 . . . . .	4,342
Manicouagan	Manic 5 . . . . .	5,848
	Manic 2 . . . . .	4,898
	Manic 1 . . . . .	565
	Manic 3 . . . . .	2,845
Other rivers	(14 plants) . . . . .	546
<b>Total</b>	(49 hydro-electric plants) . . . . .	60,987
<b>Thermal-Electric Stations</b>		
Total gross generation	(15 plants until mid-December, then 16 plants thereafter) . . . . .	219
Less: station use	. . . . . (64 plants, then 65) . . . . .	61,206
	. . . . .	324
<b>Total generation (net)</b>	. . . . .	60,882
	Alcan . . . . .	1,166
	Maclarens-Quebec Power Co. . . . .	625
	Churchill Falls (Labrador) Corporation Limited . . . . .	32,025
	Sundry purchases . . . . .	565
<b>Total purchases</b>	. . . . .	34,381
Plus: received as per agreement	. . . . .	1,972
<b>Energy available</b>	. . . . .	97,235
Less: delivered as per agreement	. . . . .	2,794
<b>Energy available (net)</b>	. . . . .	94,441
Total sales	. . . . .	84,017
Increase in unbilled sales	. . . . .	1,206
Losses and internal use	. . . . .	9,218
<b>System peaks (MW)</b>	Primary . . . . .	15,412
	Secondary . . . . .	271

## **Hydro-Québec Employees' Retirement Fund**

### **Auditors' Report**

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We have examined the statement of assets and reserve of the Hydro-Québec Employees' Retirement Fund as at December 31, 1976, and the statement of revenue and expenditure for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the assets of the Fund as at December 31, 1976, and its revenue and expenditure for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Montreal, Canada,  
April 7, 1977.

Samson, Bélair & Associés  
Chartered Accountants

H. Marcel Caron & Associés  
affiliated with Clarkson, Gordon & Co.  
Chartered Accountants

**Hydro-Québec Employees' Retirement Fund**

**Statement of Revenue and Expenditure**

(in thousands of dollars)

for the year ended December 31

		1976	1975
<b>Revenue</b>	<b>Current contributions:</b>		
	Employees . . . . .	\$ 9,328	\$ 7,618
	Hydro-Québec . . . . .	18,920	15,047
		<u>28,248</u>	<u>22,665</u>
	Contribution by Hydro-Québec for initial actuarial deficit (Note) . . . . .	2,108	2,108
		<u>30,356</u>	<u>24,773</u>
	Additional past service contributions less cancellations . . . . .	63	91
		<u>30,419</u>	<u>24,864</u>
	Less refunded to employees leaving service . . . . .	529	528
		<u>29,890</u>	<u>24,336</u>
	Revenue from investments . . . . .	19,319	15,840
		<u>49,209</u>	<u>40,176</u>
<b>Expenditure</b>	<b>Pensions paid</b> . . . . .	4,417	3,947
<b>Net revenue transferred to reserve</b>		<u>\$ 44,792</u>	<u>\$ 36,229</u>

See accompanying note

**Hydro-Québec Employees' Retirement Fund****Statement of Assets and Reserve**(in thousands of dollars)  
as at December 31

		1976	1975
<b>Assets</b>			
(note) Investments, at cost			
Bonds of, or guaranteed by the Province of Quebec	. . . . .	\$ 215,869	\$ 165,462
Municipal and School Commission bonds	. . . . .	24,907	24,806
Government of Canada bonds	. . . . .	3,280	833
(Par value \$251,759, market value \$234,833)	. . . . .	<b>244,056</b>	191,101
Common stocks (market value \$1,240)	. . . . .	1,180	1,868
Short-term investments	. . . . .	4,000	10,000
		<b>249,236</b>	202,969
Accrued interest on investments	. . . . .	5,474	4,460
Past service contributions receivable from employees	. . . . .	61	79
Amount receivable from Hydro-Québec	. . . . .	1,385	3,856
		<b>\$ 256,156</b>	\$ 211,364
<b>Reserve</b>			
Balance, beginning of year	. . . . .	\$ 211,364	\$ 175,135
Net revenue for the year	. . . . .	44,792	36,229
Balance, end of year	. . . . .	<b>\$ 256,156</b>	\$ 211,364

See accompanying note

On behalf of Hydro-Québec:

(signed) Roland Giroux  
(signed) Robert Boyd(signed) E.-A. Lemieux  
General Manager,  
Finance.Montreal, Canada,  
April 7, 1977.

# Hydro-Québec Employees' Retirement Fund

## Note to Financial Statements

December 31, 1976

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These statements show only the position of the assets of the Hydro-Québec Employees' Retirement Fund, but do not purport to show the adequacy of the fund to meet the obligations of the Hydro-Québec retirement plan which are guaranteed by Hydro-Québec. An actuarial survey of the obligations of the plan as of December 31, 1974 shows an actuarial deficit in respect of services prior to 1966 of approximately \$28 million, and an experience deficiency at December 31, 1974 in respect of current services of approximately \$5 million.

Hydro-Québec assumes the annual amortization (\$2,108,000) of the initial actuarial deficit over a period ending December 31, 1995. The experience deficiency at December 31, 1974 for current services is being amortized over a period of 5 years, from 1975 to 1979 inclusive. As a result, contributions to the fund are sufficient to cover obligations in respect of current services and the amortization of the above actuarial deficit in respect of past services over a period ending December 31, 1995.

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